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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/492,462	01/27/2000	Toru Yamada	016891/0807	9897

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FOLEY AND LARDNER
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WASHINGTON, DC 20007

EXAMINER

ABDULSELAM, ABBAS I

ART UNIT

PAPER NUMBER

2674

DATE MAILED: 03/12/2004

23

Please find below and/or attached an Office communication concerning this application or proceeding.

DM

Office Action Summary

Application No.

09/492,462

Applicant(s)

YAMADA, TORU

Examiner

Abbas I Abdulsalam

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6-8 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6-8 and 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/24/04 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 6-8 and 12-15 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 8 and 12-15 rejected under 35 U.S.C. 103(a) as being unpatentable over Kori et al. (USPN 5914754) in view of Ishikawa et al. (USPN 6458520).

Regarding claims 1, 8 & 15, Kori teaches a video-signal aspect ratio conversion apparatus that allows a wide screen picture to be transmitted and displayed by a 4:3 television without deforming the shape of the original picture. Kori also discloses that a 16:9 video picture is to be

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displayed on a 4:3 television screen with an area in the 16:9 picture being enlarged. See col. 9, lines 43-46. Kori shows in Fig. 16 (a, b, c), an original picture (16:9), transmitted picture (NTSC) and a 4:3 TV respectively. However, Kori does not specifically teach a second picture data consisting of a first black area, a second black area and an area consisting of reduces number of lines, the reduced number of lines being half a number of the first picture. On the other hand, Kori discloses a microcomputer (5) setting the aspect conversion ration in a needed size as indicated on col. 4, lines 53-65 and Fig. 1.

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the microprocessor (5) the use of which includes determining aspect ratios of the input signals in order that that a proper signal is outputted. One would have been motivated in view of the suggestion that the microprocessor can be used to obtain the desired picture data with reduced number of lines.

In addition, it would have been obvious to utilize the microprocessor to set the picture data such that the number of lines is cut by half. Consequently, this particular setting would have made the picture data on 4:3 TV of Fig. 16c enlarge $3/2$ times relative to the data in the setting.

Kori does not teach transferring of a second picture data to a frame data buffer, and auxiliary processing unit which inputs the second picture data from the frame data buffer. Ishikawa on the other teaches a picture-processing device (5), (Fig. 2) including a first picture processing means (61), a second picture processing means (62) as shown in Fig. 6. Ishikawa further teaches that the processing device (5) includes line buffers (50a, 50b) receiving image data from operation means (49) and transferring the data to frame memory units (51, 52). See Figs 5-6.

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Kori's aspect ratio conversion system to adapt Ishikawa's processing device (5) including buffer lines (50a, 50b), frame memory units (51, 52), and processing means (61, 62) as shown in Figs 5-6. One would have been motivated in view of the suggestion in Ishikawa that the processing device (5) is functionally equivalent to the desired use of frame data buffer and auxiliary processing unit. The use of picture processing device (5) helps an image formation process as taught by Ishikawa.

Regarding claims 8 and 15, Kori teaches enlargement in both horizontal and vertical directions on a 4:3 TV display that would result in offsetting of the picture data expressed by a pair of (X, Y) coordinates. See col. 8, lines 47-59 and Fig. 10. It would have been obvious to utilize the offsetting technique used in Fig. 10 to obtain the desired enlarged frame.

Regarding claim 12, see Kori's Fig. 16b and 16c.

Regarding claims 13-14, Kori discloses specifying the position of a screen and enlargement in the horizontal and vertical directions expressed by a pair of coordinates, (X, Y). See Fig. 10.

Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kori et al. in view of Ishikawa and in further view of Tonomura et al. (USPN 5323235).

Regarding claims 6-7, Kori as modified has been discussed above. However, Kori does not disclose the picture data compressed by MPEG format and interlace scanning format. Tonomura on the other hand teaches aspect ratio converting portion (36) including compression controller (43), which determines compression ratio. See col. 15, lines 27-29 and Fig. 6. Further,

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Tonomura discloses scanning period of a given picture with respect to compression process. See the abstract.

It would have been obvious to further modify Kori's method of aspect ratio conversion to adapt Tonomura's compression controller. One would have been motivated in view of the suggestion in Tonomura that the compression controller (43) as utilized in Fig. 6 provides the desired data compression. The use of compression controller helps function aspect ratio conversion apparatus as taught by Tonomura.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art is cited for further reference.

U.S. Pat. No. 5,739,867 to Eglit

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to **Abbas Abduselam** whose telephone number is **(703) 305-8591**. The examiner can normally be reached on Monday through Friday (9:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard Hjerpe**, can be reached at **(703) 305-4709**.

Any response to this action should be mailed to:

Commissioner of patents and Trademarks

Washington, D.C. 20231

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or faxed to:

(703) 872-9314

Hand delivered responses should be brought to Crystal Park II, Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).


Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology center 2600 customer Service office whose telephone number is (703) 306-0377.

Abbas Abdulsalam

Examiner

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March 6, 2004


XIAO WU
PRIMARY EXAMINER